

| L Number | Hits    | Search Text  | DB  | Time stamp          |
|----------|---------|--|---|---------------------|
| 1        | 9882    | shaft with furnace   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:30 |
| 2        | 728794  | rectangular  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:30 |
| 3        | 524     | (shaft with furnace) and rectangular   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:30 |
| 4        | 1028167 | cross with section   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:31 |
| 5        | 328     | ((shaft with furnace) and rectangular)<br>and (cross with section)                                       | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:32 |
| 6        | 26023   | 266/\$.ccls.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:32 |
| 7        | 36152   | 75/\$.ccls.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:33 |
| 8        | 58143   | 266/\$.ccls. or 75/\$.ccls.  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:33 |
| 9        | 97      | ((shaft with furnace) and rectangular)<br>and (cross with section)) and<br>(266/\$.ccls. or 75/\$.ccls.) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:33 |
| 10       | 277098  | metal with oxide   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:34 |
| 11       | 15079   | iron with ore  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:34 |
| 12       | 290655  | (metal with oxide) or (iron with ore)  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:34 |
| 13       | 36735   | solid with fuel  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:35 |
| 14       | 60374   | coke   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:35 |
| 15       | 121507  | coal   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:35 |
| 16       | 15079   | iron with ore  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:36 |
| 17       | 190684  | (solid with fuel) or coke or coal  | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:37 |

|    |    |  |   |                     |
|----|----|--|---|---------------------|
| 18 | 34 | ((shaft with furnace) and rectangular) and (cross with section)) and (266/\$.ccls. or 75/\$.ccls.) and ((metal with oxide) or (iron with ore)) and ((solid with fuel) or coke or coal) | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>16:59 |
| 19 | 93 | 75/490.ccls.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>17:01 |
| 20 | 2  | rectangular and 75/490.ccls.   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>17:04 |

PGPUB-DOCUMENT-NUMBER: 20030000343

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030000343 A1

TITLE: Equipment for distribution and feeding of charge  
and fuel in shaft  
furnaces of rectangular cross section

PUBLICATION-DATE: January 2, 2003

INVENTOR-INFORMATION:

| NAME                  | CITY           | STATE |
|-----------------------|----------------|-------|
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| Contrucci, Marcos de  | Rio de Janeiro | BR    |
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| Costa, Pedro Henrique |                |       |
| Carpinetti            |                |       |

APPL-NO: 09/ 892654

DATE FILED: June 28, 2001

INT-CL:[07], C22B001/214 , C21B011/02

US-CL-PUBLISHED: 75/488, 266/197

US-CL-CURRENT: 75/488, 266/197

REFERENCE-FIGURES: 1

ABSTRACT:

The present invention refers to an equipment for feeding and distributing charge and fuel in furnaces of rectangular cross section, comprising movable feeding tubes to distribute along the longitudinal section and the cross section of the furnace, both a charge comprised of self-reducing agglomerates, ore, scrap or any other metallic material, and solid fuels of any kind.

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| 21 | 0  | (rectangular and 75/490.ccls.) and ((solid with fuel) or coke or coal)   | USPAT;<br>US-PGPUB;<br>EPO; JPO;<br>DERWENT | 2003/03/15<br>17:05 |